<table>
<tr><td rowspan="2">PROGRAMME SPECIFICATION</td><td>Newcastle University</td></tr>
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1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University (Newcastle Campus)
3	**Final Award**	MSc
4	**Programme Title**	Economics (pathways: Economics and Data Science; Behavioural and Experimental Economics)
5	**UCAS/Programme Code**	5464 - MSc Economics 5465 - MSc Economics and Data Science 5466 - MSc Behavioural and Experimental Economics
6	**Programme Accreditation**	N/A
7	**QAA Subject Benchmark(s)**	N/A
8	**FHEQ Level**	Level 7
9	**Date written/revised**	May 2024

10	**Programme Aims**

- To produce graduates possessing deep knowledge and understanding of economic theories and an ability to apply this to national and global issues

- To develop advanced skills in economic analysis and quantitative methods

- To develop logical thinking and critical analysis

- To equip graduates with a suite of key skills including the abilities to communicate effectively, to employ IT and library resources appropriately, to prioritise work and meet deadlines, to use initiative and to solve problems

- To offer graduates a gateway to working as a professional and/or research economist or to pursue postgraduate research

- To provide a qualification which fully meets the expectation at Level 7 of the Framework for Higher Education Qualification

11	**Learning Outcomes**

The programme provides students with advanced training in economics equipping them with the required skills for a career as an economist or pursuing a PhD in Economics. The programme offers specialist pathways that allow students to specialise in Economics and Data Science, or Behavioural Experimental Economics.

Knowledge and Understanding

A successful student will have gained and be able to demonstrate:

A1   An advanced understanding of the theory and applications of economics.

A2   An ability to formulate and draw conclusions from an economic model.

A3   An ability to apply economic analysis to arrange of policy issues.

A4   An ability to test and evaluate economic models, using a wide range of research techniques.

A5	An ability to present ideas and arguments with clarity and research findings with interpretation.

Teaching and Learning Methods

Teaching Strategy
The teaching methods will comprise of lectures and where appropriate computer classes. Knowledge and understanding will be promoted further by seminars and independent study. primary means of imparting knowledge and understanding in all the above is through lectures supplemented, as appropriate, with seminars, tutorials and computer classes, and students' independent study. Knowledge and understanding are promoted further by case studies and exposure to current literature. The learning outcomes will be enhanced by the dissertation component which accounts for a third of the overall credits.

Learning strategy

Throughout the taught component of the programme, students are encouraged and expected to engage in independent reading and thinking. They are supported in this by the provision of reading lists relating to each module. Students are also encouraged to engage in group discussions during student-led seminars and reflection on data analysis during the quantitative methods lectures and seminars.

Assessment Strategy

Knowledge and understanding are assessed through a mixture of written examinations, held at the end of each module and a variety of continuous forms of assessment, including essays, problem-solving exercises mid-semester and end of semester exams. Students are required to write a 60-credit dissertation which is their own individual research.

Intellectual Skills

On completing the programme students should be able to:

B1   Conceptualise real world problems using their knowledge gained from core modules that relate to economic theory and applications.

B2   Using quantitative methods that help to construct, measure and analyse economic models and test theories using real world data.

B3   Present data and research findings in written format that may have the makings of a journal article as expected from an individual piece of research. This skill should develop from the students' dissertation.

B4   Competently undertake research in any field of economics. The overall knowledge gained from the taught components should help students to think critically and work on a research project of their choice.

Teaching and Learning Methods

Teaching Strategy
Compulsory modules in semester 1 will help students achieve B1, B2 and B4. The dissertation component will prepare students especially for B3 as well as B1, B2 and B4. The core modules in Semester 1 allow students to develop skills relating to advanced economic theory and applications as well as quantitative techniques. The range of options in Semester 2 allow students to delve further in to advanced topics or specialise in areas that can lead to pathways. They will learn the necessary skills to complete an independent piece of research at the end of the taught component of the programme.

Learning Strategy
Students are encouraged to develop subject specific skills via study of the core syllabus supplemented by appropriate reading material on research methods, to which they are directed. Learning is further enhanced by active participation in seminars and group discussions in the compulsory modules. Opportunity for focused individual learning is offered via the dissertation,

where students, guided by a supervisor, design and execute their own research projects on a relevant topic of their choice.

Assessment Strategy

B1, B2 and B4 is assessed by unseen written examinations and a variety of continuous forms of assessment, including essays, problem-solving exercises and tests. B3 is assessed by grading the dissertation which is based on independent research.

Practical Skills

On completing the programme students should be able to:

C1   Analyse real world problems through their understanding of advanced economic theory and applications.

C2   Replicate empirical studies published in journal articles and reports published by organisations such as government or intergovernmental bodies.

C3   Question or challenge current ideas or assumptions.

C4   Identify gaps or weaknesses in existing knowledge, derive valid hypotheses based on these, and identify appropriate means of testing them.

Teaching and Learning Methods

Teaching Strategy
The lecture material and seminars associated with the core modules in semester 1 will help students achieve C1 and C2. The core modules in microeconomics and macroeconomics will provide the strong grounding required in economic theory and applications. The quantitative methods modules (i.e., Mathematical Analysis and Econometrics) will provide the students with the tools to formulate and test models which includes replication of existing studies. The lecture material and seminars contained in the optional modules in semester 2 will help students achieve C3 and C4. The lecture material included in semester 2 will largely consist of leading edge and recent research that offers new and challenging insights to existing economic problems.

Learning Strategy
Throughout the programme, students develop cognitive skills by participating in large group lectures and small group seminars. The dissertation offers the opportunity for students to apply their cognitive skills in-depth, guided by their supervisor. Design, execution and reporting of the final dissertation project enhance the learning of these skills in a focused manner.

Assessment Strategy

Cognitive skills are assessed through various forms which include essays, problem solving exercises and exams.

Transferable/Key Skills

On completing the programme students should be able to:

D1   Communicate clearly and effectively economic ideas that one would expect from a professional economist.

D2   Make effective use of information sources by knowing how to choose, collect and transform appropriate data.

D3   Expertise in the use of econometric software to handle data sets and build quantitative skills that help develop sound logic; skills that increase effectiveness in the workplace.

D4   Plan, organise and prioritise work effectively to meet deadlines and objectives.

D5   Work independently, with initiative and adaptability.

Teaching and Learning Methods

Teaching Strategy
Key skills are taught formally in all the modules in semester 1 and 2 through the core modules as well as optional modules (D1, D2 and D3). Supervision sessions towards the dissertation help students to plan and work independently (D4 and D5). In general, the deadlines set for submitting essays and preparing for exams helps students develop time management skills. The mode of delivery of taught modules provides students with the opportunity to improve their problem-solving abilities. The dissertation project provides students with further opportunities to develop all of these skills.

Learning Strategy
Students are provided with the opportunity to develop and practice all key skills as part of compulsory core modules. The quantitative methods modules (i.e., Mathematical Analysis and Econometrics) in particular, obliges students to make appropriate use of data and specialist software training (D2 and D3). D1 and D4, and D5 are also developed as part of compulsory modules and dissertation supervision. The experience of preparing and executing the dissertation provides students with the opportunity to apply all key skills under the guidance of the supervisor.

Assessment Strategy

All key skills are indirectly assessed by the experience of undertaking the dissertation.

12   Programme Curriculum, Structure and Features
Basic structure of the programme

A   *Programme Features*
This is a one-year programme to be studied full time. It consists of two parts: a taught component, which runs from late September until mid-May, and a project, for which a dissertation is submitted in early September. Successful completion of the taught component is required in order for a student to progress to the dissertation project.

The taught component of the course consists of 120 credits of modules. This is followed by a dissertation to a value of 60 credits. The dissertation involves independent research. Students who produce excellent dissertations will be encouraged to publish their work in academic journals.

B   *Programme Structure*
Semester 1 provides the core components of the postgraduate Economics programme. Students who would like to graduate with an MSc in Economics are required to choose in Semester 2 specific modules (Topics in Microeconomics and Topics in Macroeconomics) which are offered as optional modules along with 20 credits of other modules. The key elements of knowledge and understanding of Economics (A1-A4) are taught within these core compulsory modules.

Students have the option of choosing another pathway of graduating with MSc Economics and Data Science by opting for the modules Applied Data Science and Numerical Methods along with 20 credits of other optional modules. A further pathway could be graduating with MSc in Behavioural and Experimental Economics by opting for the modules Experimental Methods and Behavioural Economics in Semester 2.

The subject specific and practical skills (B1, B2, B4) are taught within the taught programme. The key skills (D1-D3) are developed within the modules. This skill is applied at an advanced level (D4, D5) during the dissertation. Furthermore, the application of computer skills will be developed in Mathematical Analysis and Econometrics as part of the quantitative methods modules in semester 1. These computing skills can also be employed within the dissertation.

Key features of the programme (including what makes the programme distinctive)

Semester 1 provides the theoretical background that is compulsory for the MSc Economics as well as the alternative pathways MSc 'Economics and Data Science or MSc Behavioural and Experimental Economics, which account for 60 credits in total. In this semester, students will be provided with advanced knowledge of economic theory and applications. Students will develop skills that can help them to formulate and draw conclusions from economic models and apply them to policy issues. Students will also benefit from the quantitative modules that will provide students with the tools to develop a proof-based approach, and to provide a firm grounding in economic theory while also presenting modern, technical tools and procedures for empirical analysis in economics.

Semester 2 provides students the opportunity to choose modules that qualify them to graduate with MSc in Economics or choose two other separate pathways, being MSc in Economics and Data Science, or MSc Behavioural and Experimental Economics. For those choosing the MSc Economics route, students will be required to take 40 credits of modules comprising of Topics in Microeconomics and Topics of Macroeconomics. In these modules, students will be introduced to current research topics in the field that draws on from different areas such as health, crime, development and industrial economics, as well as economic growth, financial stability and the open economy. The aim is to make use the knowledge gained in semester 1 on economic theory as well as the skills in quantitative methods and to put in practice the ability to learn about recent research in the field of microeconomics and macroeconomics. For students who choose the pathway MSc Economics and Data Science, will require to take 40 credits of Applied Data Science and Numerical methods, where they will cover new methods that involve classification and resampling methods as well as popular statistical learning algorithms focussed on how these can increase our understanding of data. The key feature of this programme is that students will learn scientific computing to analyse large data sets and implement algorithms and compute them using popular software packages such as R and PYTHON. The third pathway is MSc Behavioural and Experimental Economics where students are required to take 40 credits of Behavioural Economics and Experimental Methods. The key feature of this programme is that students will learn how psychological foundations of behaviour are incorporated in recent developments of economic theory and to critically assess why economists may benefit from conducting experiments and what insights they can provide. There are optional modules that will be open to students of all pathways and these include two 20 credit PhD modules being Applied Time Series Econometrics and Causal Inference and Micro-econometrics. The key features of these modules are to develop a firm understanding of econometric methodologies used to analyse economic data and critically evaluate published empirical research to analyse the strengths and weaknesses in such work.

Dissertation: This part of the programme follows after semester 2 and is worth 60-credits where students write a research paper over three months. It is expected that the dissertation will closely follow the selected pathway chosen by the student. This module provides the opportunity to pose a research question, to find an appropriate method for analysing the question; this could include development of theoretical models and/or analysis of data, and to write up the results that follows the style of a journal article. The key feature of this module is that the work by the student is independent, with guidance provided by an assigned supervisor in the area. This part of the programme will help students to get a flavour of doctoral research. They will also develop the skills to critically review literature, develop the skills of writing reports and presenting results in an effective manner, and working to deadlines.

Programme regulations (link to on-line version)

[5464 Programme Regulations 24-25](#)

13	**Support for Student Learning**

Generic information regarding University provision is available [here](#).

14	Methods for evaluating and improving the quality and standards of teaching and learning

Generic information regarding University provision is available here.

Accreditation reports
None

Additional mechanisms
None

16	Regulation of assessment

Generic information regarding University provision is available here.

In addition, information relating to the programme is provided in:

The University Prospectus: http://www.ncl.ac.uk/postgraduate/courses/

Degree Programme and University Regulations: http://www.ncl.ac.uk/regulations/docs/

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.